California Dungeness Crab Fishing Gear Working Group (WG) 2018-19 Risk Assessment and Mitigation Program (RAMP)

Summary of 1-2 Nov 2018 aerial survey

(Prepared by Karin Forney, NOAA/SWFSC; scientific advisor to the WG)

Survey Logistics:

The survey was conducted over two days, Thu Nov 1 and Fri Nov 2. Weather was sufficiently good south of Bodega Bay only, so we flew randomly placed transects, spaced 4 nautical miles apart, between Bodega Head and Cypress Point, extending into slightly deeper waters than last year (200 m, ~110 fm) to ensure we would detect any whales feeding along the shelf break. The survey was flown in a twin-engine, highwing aircraft (Partenavia P-68), chartered from Aspen Helicopters, Inc in Oxnard. Karin Forney led the survey, which also included biologist Scott Benson (NOAA/SWFSC) and fisherman Dick Ogg (WG member) on Nov 1, and Scott Benson and Jean de Marignac (NOAA/MBNMS) on Nov 2. Karin recorded data into a laptop connected to a GPS, while Scott and Dick/Jean each searched on one side of the plane through bubble windows. All whales were recorded systematically, and we also recorded any documented fishing gear ('crab pots') and surface-visible anchovy 'bait balls'. Dolphins and porpoises were also recorded when on transect lines.

Survey Results:

Completed transects lines). (gray sightings of whales, and locations of crab pot gear and anchovy balls are shown in Figure 1. Viewing conditions were mostly good, except for higher winds at the 38.00offshore end of some lines, and a thin fog patch that interrupted five lines in the area from Ano Nuevo to Pigeon Point. Whale numbers recorded during the survey represent a minimum, because animals that are diving when the plane passes overhead cannot be detected. Some whales could not be identified because they dove or were too distant.

Key observations:

1. Multiple aggregations of humpback whales were documented off Pt. 36.50 Reyes, just outside of the Golden Gate, off Pigeon Point, and in Monterey Bay.

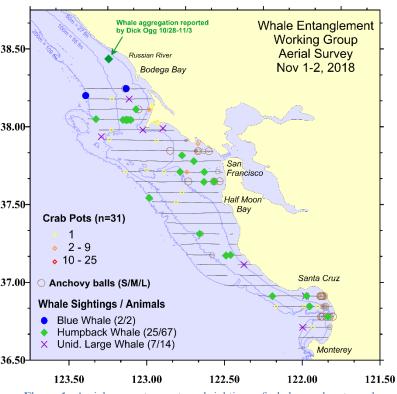


Figure 1. Aerial survey transects and sightings of whales, crab pots, and anchovy bait balls, 1-2 Nov 2018

- 2. Surface-visible anchovy balls were also documented near the humpback whale aggregations, suggesting they were feeding on anchovies in these areas.
- 3. Two blue whales were seen SW of Bodega, in water depths of about 40 fm and 110 fm.
- 4. Crab pots, presumed to be lost gear, were documented throughout much of the study area, especially from Half Moon Bay to Tamales Bay and including an entire string of at least 8 pots near Bolinas. Most of the gear had two buoys with varying lengths of line between the main buoy and trailer buoy.